



## Team Contest

You are a staff member of a university. Your university is registering several teams to participate in a programming contest. The programming contest is participated by teams of three programmers.

In your university, there are  $N$  eligible programmers, numbered from 0 to  $N - 1$ . For each  $i$  such that  $0 \leq i \leq N - 1$ , programmer  $i$  has a skill level of  $L[i]$ . The skill level of a team consisting of programmer  $i$ ,  $j$ , and  $k$  is  $\min(L[i], L[j], L[k]) + \max(L[i], L[j], L[k])$ .

You want to only register teams with a skill level of strictly more than  $K$ . Each programmer may only be assigned to at most one registered team. You want to know the maximum number of teams you can register.

## Implementation Details

You should implement the following procedure:

```
int maximum_teams(int N, int K, int[] L);
```

- $N$ : the number of programmers.
- $K$ : the skill level limit of the registered teams.
- $L$ : an array of length  $N$  describing the skill level of the programmers.
- This procedure should return the maximum number of teams you can register.
- This procedure is called exactly once.

## Examples

### Example 1

Consider the following call:

```
maximum_teams(8, 6, [5, 4, 6, 2, 3, 2, 1, 1])
```

You can register a team with programmer 0, 3, and 5 (with skill levels 5, 2, 2 respectively) and a team with programmer 1, 2, and 4 (with skill levels 4, 6, 3 respectively). There is no way to register more than two teams. Therefore, the procedure `maximum_teams` should return 2.

## Constraints

- $1 \leq N \leq 100\,000$
- $1 \leq K \leq 10^8$
- $1 \leq A[i] \leq 10^8$  (for each  $i$  such that  $0 \leq i \leq N - 1$ )

## Subtasks

1. (6 points)  $N \leq 3$
2. (12 points)  $N \leq 8$
3. (37 points)  $N \leq 1000$
4. (45 points) No additional constraints.

## Sample Grader

The sample grader reads the input in the following format:

- line 1:  $N\ K$
- line 2:  $L[0]\ L[1]\ \dots\ L[N - 1]$

The sample grader prints your answer in the following format:

- line 1: the return value of `maximum_teams`